

Claims

- [c1] A dynamic hip stabilizer for preventing hip dislocation of a wearer, the stabilizer comprising:
a pelvic girdle defining an upper opening for the wearer's waist;
at least one thigh cuff defining a lower opening for the wearer's thigh;
elastic cables attached to the pelvic girdle and the thigh cuff and extending therebetween in a longitudinal direction of the dynamic hip stabilizer; and
channeling means associated with the pelvic girdle for guiding and controlling movement of the elastic cables in the longitudinal direction of the stabilizer and for inhibiting movement of the elastic cables in directions transverse to the longitudinal direction of the stabilizer.
- [c2] The dynamic hip stabilizer according to claim 1, wherein each of the pelvic girdle and the thigh cuff comprises an outer layer of a fabric material overlying an inner layer of a soft lining material.
- [c3] The dynamic hip stabilizer according to claim 2, further comprising at least one extension comprising the soft lining material and free of the fabric material, the exten-

sion interconnecting the inner layer of the pelvic girdle and the thigh cuff at an outer lateral region of the wearer.

- [c4] The dynamic hip stabilizer according to claim 1, wherein the channeling means comprises loops attached to the pelvic girdle and extending in the longitudinal direction of the dynamic hip stabilizer.
- [c5] The dynamic hip stabilizer according to claim 4, wherein the loops are aligned in multiple rows in the longitudinal direction of the dynamic hip stabilizer.
- [c6] The dynamic hip stabilizer according to claim 1, wherein at least one of the elastic cables passes from a posterior portion of the pelvic girdle to an anterior portion of the thigh cuff, the tensile forces generated by the at least one elastic cable controlling excessive internal or external rotation.
- [c7] The dynamic hip stabilizer according to claim 1, wherein the elastic cables are not all of the same length.
- [c8] The dynamic hip stabilizer according to claim 1, further comprising means for attaching the elastic cables to the pelvic girdle and the thigh cuff, the attaching means providing multiple attachment points for each of the elastic cables on each of the pelvic girdle and the thigh

cuff so as to enable selective decreasing and increasing of the tensile force generated by each of the elastic cables.

- [c9] The dynamic hip stabilizer according to claim 1, wherein the pelvic girdle further comprises a lower opening for the wearer's hips and the thigh cuff further comprises an upper opening for the wearer's thigh.
- [c10] The dynamic hip stabilizer according to claim 9, wherein the pelvic girdle and the thigh cuff are each equipped with hook-and-loop closures so as to permit adjustment of the sizes of the upper and lower openings thereof.
- [c11] A dynamic hip stabilizer worn by a wearer to prevent hip dislocation of the wearer, the stabilizer comprising:
 - a pelvic girdle formed of an outer layer of a fabric material overlying an inner layer of a soft lining material, the pelvic girdle being narrower at an uppermost extent thereof to define an upper opening for the wearer's waist and being wider at a lowermost extent thereof to define a lower opening for the wearer's hips, the inner layer comprising lateral portions extending beyond the outer layer at lateral regions of the pelvic girdle;
 - at least one thigh cuff formed of an outer layer of fabric material overlying an inner layer of a soft lining material, the thigh cuff being wider at an uppermost extent

thereof to define an upper opening for a thigh of the wearer and being narrower at a lowermost extent thereof to define a lower opening for the wearer's thigh; elastic cables attached to the pelvic girdle and the thigh cuff and extending therebetween in a longitudinal direction of the dynamic hip stabilizer, the elastic cables generating sufficient tensile forces to hold the wearer's thigh with enough tension to control excessive adduction, flexion and extension, provide hip stability by controlling and modifying hip motions through increasing tension as extremes of a hip motion are approached, and provide hip stability by maintaining elevated abductor tension; and channeling means associated with the pelvic girdle for guiding and controlling movement of the elastic cables in the longitudinal direction of the stabilizer and for inhibiting movement of the elastic cables in directions transverse to the longitudinal direction of the stabilizer during movement of the wearer's hips and the wearer's thighs relative to the wearer's hips.

[c12] The dynamic hip stabilizer according to claim 11, wherein the channeling means comprises loops attached to the pelvic girdle and extending in the longitudinal direction of the dynamic hip stabilizer toward the lower opening of the pelvic girdle.

- [c13] The dynamic hip stabilizer according to claim 12, wherein the loops are aligned in multiple longitudinal rows in the longitudinal direction of the dynamic hip stabilizer.
- [c14] The dynamic hip stabilizer according to claim 11, wherein at least one of the elastic cables passes from a posterior portion of the pelvic girdle to an anterior portion of the thigh cuff, the tensile forces generated by the at least one elastic cable controlling excessive internal or external rotation.
- [c15] The dynamic hip stabilizer according to claim 11, wherein one of the lateral portions of the inner layer of the pelvic girdle is releasably attached to the thigh cuff.
- [c16] The dynamic hip stabilizer according to claim 11, wherein the stabilizer comprises two of the thigh cuffs, a first of the lateral portions of the inner layer of the pelvic girdle is releasably attached to a first of the two thigh cuffs, and a second of the lateral portions of the inner layer of the pelvic girdle is releasably attached to a second of the two thigh cuffs.
- [c17] The dynamic hip stabilizer according to claim 11, wherein each of the inner layers of the pelvic girdle and the thigh cuff has high skin friction equivalent.

- [c18] The dynamic hip stabilizer according to claim 11, wherein the elastic cables are not all of the same length.
- [c19] The dynamic hip stabilizer according to claim 11, further comprising means for attaching the elastic cables to the pelvic girdle and the thigh cuff, the attaching means providing multiple attachment points for each of the elastic cables on each of the pelvic girdle and the thigh cuff so as to enable selective decreasing and increasing of the tensile force generated by each of the elastic cables.
- [c20] The dynamic hip stabilizer according to claim 11, wherein the pelvic girdle and the thigh cuff are each equipped with hook-and-loop closures so as to permit adjustment of the sizes of the upper and lower openings thereof.